PUK12

COST-MINIMIZATION ANALYSIS OF EVEROLIMUS FOR KIDNEY TRANSPLANTATION IN BRAZIL

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OBJECTIVE: To analyse the cost-minimization of Everolimus in comparison with Sirolimus for immunosuppression in kidney transplantation. **METHODS:** A cost-minimization analysis from the Brazilian National Health system perspective, with a time horizon of seven years were conducted. A decision tree with a Markov chain considering the probabilities of graft loss or maintenance through health states related to presence or absence of any relevant health event, were performed. Study comparators examined were Everolimus (EVE) and Sirolimus (SLR). The clinical aspects regarding benefits and probabilities of transition data were extract from meta-analysis of published randomized clinical trials for the alternatives. The analysis is based on Brazilian current clinical practice. Treatment costs were collected from public reimbursement list. Costs and benefits were validated by a panel of Brazilian specialists from Ministry of Health through the Delphi technique. The discounting rate was 5% for costs and benefits, the results were converted in US Dollars (R$1.8/USD$1.00). A one-way sensitivity analysis was performed. **RESULTS:** Patients using Everolimus get the lowest total cost per treatment (EVE = $15,347.58USD; SLR = $29,959.6USD). The sensitivity analysis on costs variables in an interval of ±80%, was robust with the base analysis. **CONCLUSION:** Everolimus is a cost-saving alternative for immunossuppresion in kidney transplantation compared to Sirolimus in the perspective of Brazilian Public Health System.

PUK13

A COST MINIMIZATION ANALYSIS OF EPOETIN ZETA FOR THE TREATMENT OF ANEMIA ASSOCIATED WITH CHRONIC KIDNEY DISEASE

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OBJECTIVE: Current National Institute for Health and Clinical Excellence (NICE) Clinical Guidelines on managing anemia in patients with chronic kidney disease (CKD) state that there is no evidence to differentiate between erythropoiesis-stimulating agents in terms of efficacy. Cost minimization analysis (CMA) is, therefore, an appropriate health economic approach in this therapy area. This CMA of epoetin zeta (Retacrit®), a biosimilar agent of epoetin alfa, versus current standard treatments was conducted from the perspective of NHS Scotland. **METHODS:** A CMA of intravenous and subcutaneous epoetin, published in the full NICE Clinical Guidelines, was used as a framework for this cost analysis of epoetin zeta, the reference product epoetin alfa, epoetin beta and darbepoetin alfa. In both the NICE and this analysis, it was assumed that the cost difference of epoetin and iron administration would be negligible. Licensed epoetin doses were incorporated in this analysis. **RESULTS:** This analysis demonstrates that epoetin zeta minimizes costs for treating anemia associated with CKD when compared with the reference product, epoetin alfa. The cost of epoetin zeta for a hemodialysis patient is £59.39/week (hemoglobin correction phase) and £29.70–£118.79/week (hemoglobin maintenance phase), based on a 70 kg patient. The corresponding cost for a patient treated with epoetin alfa is £67.32/week and £33.66–£134.64/week. The low drug acquisition cost for epoetin zeta could lead to potential cost savings. **CONCLUSION:** CMA is an appropriate approach for managing anemia in people with CKD. This analysis demonstrates that the biosimilar product, epoetin zeta, minimizes treatment costs and would be of benefit to patients and NHS Scotland.

PUK14

INPATIENT COSTS AND CLINICAL OUTCOMES OF S. AUREUS BLOODSTREAM AND NON-BLOODSTREAM INFECTION IN PATIENTS WITH END-STAGE RENAL DISEASE: FINDINGS FROM A MULTI-CENTER TRIAL

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OBJECTIVE: Using data from a large, multicenter, double-blind, phase III clinical trial designed to evaluate the efficacy and safety of a vaccine intended to reduce the incidence of S. aureus infection in adults with ESRD receiving hemodialysis, we examined inpatient costs, inpatient days, and mortality associated with S. aureus bloodstream and non-bloodstream infections. **METHODS:** Inpatient bills were obtained for patients hospitalized with S. aureus infection. Clinical and laboratory data were recorded in the report form. Hospital charges were converted to costs using department-level cost-to-charge ratios derived from each hospital's Annual Medicare Cost Report. Statistics were used to report 12-week economic and clinical outcomes. Among patients with S. aureus bacteremia, those with additional sites of S. aureus infection were compared to those without using generalized linear regression models adjusting for confounders. **RESULTS:** Among 89 patients hospitalized with S. aureus bacteremia, the mean inpatient cost was $19,454 (median: $13,011) over 12 weeks, representing an average of 11.9 inpatient days. Among 70 patients hospitalized with non-bloodstream S. aureus infections, the mean 12-week cost was $19,222 (median: $13,106) across a mean of 11.3 inpatient days. Twelve-week mortality was 20.2% for patients with S. aureus bacteremia and 15.7% for patients with non-bloodstream S.aureus infections. When adjusting for baseline demographics and medical history among patients with S. aureus bacteremia, those who experienced additional sites of S. aureus infection ($n = 33$) incurred 1.43-fold higher 12-week inpatients costs compared to those without sites of S. aureus infection ($p = 0.0497$). Inpatient days (13.5 vs. 11.0; $P = 0.3154$) and 12-week mortality (15.15% vs. 23.21%; $P = 0.6569$) did not significantly differ between S. aureus bacteremia patients with and without additional sites of S. aureus infection. **CONCLUSION:** S. aureus infections impose considerable economic burden in ESRD patients undergoing hemodialysis. The existence of additional sites of S. aureus infection among patients with S. aureus bacteremia increases inpatient costs.

PUK15

COST IMPLICATIONS OF INTRAVENOUS (IV) BEVACIZUMAB TREATMENT IN PATIENTS WITH RENAL CELL CARCINOMA (RCC)

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OBJECTIVE: Angiogenesis inhibitor therapies (oral sunitinib or sorafenib, or IV bevacizumab off-label) are currently available as treatments for RCC patients. However, IV therapy may impose additional burdens for patients such as time lost in travel to treatment facilities, infection risk from IV catheters and increased costs. The potential incremental cost by resource use category associated with IV vs. oral administration of selected angiogenesis inhibitor therapies for the treatment of RCC was evaluated.